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► To cite this version:

Valérie Matoïan, Juan-Pablo Vita. The Administration of Wine in Ugarit. *Die Welt des Orients*, 2018, 48 (2), pp.299-318. 10.13109/wdor.2018.48.2.299 . halshs-02486754v2

HAL Id: halshs-02486754

<https://shs.hal.science/halshs-02486754v2>

Submitted on 8 Jan 2024

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The Administration of Wine in Ugarit

Valérie Matoïan and Juan-Pablo Vita

Abstract

The present contribution will focus on the information provided by the texts from Ugarit concerning the specific matter of the management of wine by the central administration of the kingdom, specially registers of vineyards, deliveries of wine to the administration, supplies of wine from the administration, and the storage of wine. It also comments on terms referring to vine, vineyards, (vine-)stock, grapes, raisin, and measures of capacity. This information will be supplemented by archaeological and iconographical data, also considering the physical geography of the kingdom.

1. Introduction

Ras Shamra is a tell located about 10 km to the north of the modern city of Latakia (Syria).¹ Exploration of the tell, since 1929,² has revealed the remains of the ancient city of Ugarit, the capital of the kingdom of the same name. Because of its geographical extension, political power and military capacity, it was a middle-sized kingdom within the parameters of Syria in the 2nd millennium BC, but in terms of economy, it had a leading role. In fact, it was a major trading centre in the Eastern Mediterranean at the time of the Mycenaean civilisation and the New Empire in Egypt, lying on the fringes of the Hittite empire. Ugarit disappeared from history at the end of the Late Bronze Age (about the beginning of the 12th century BC), a period of turmoil and crisis in the Eastern Mediterranean and in the Near East, during which significant Aegean, Cypriot, Anatolian and Levantine towns suffered major destruction and the Hittite empire collapsed.³ The causes of these dramatic changes are still largely debated (variously migrations, invasions of the Sea People, economic and social disintegrations or even environmental disasters).

A long series of archaeological campaigns at Ugarit has brought to light a clear town plan of this Mediterranean capital at the end of the 2nd millennium BC, with its residential quarters arranged into blocks, an area on the Acropolis where the two great temples of the city and a vast palace sector, well separated to the north-east, are served by one of the city gates. Also, a considerable amount of archaeological and epigraphic discoveries allow us to reconstruct a flourishing civilisation, set between Anatolia and Egypt and also between Mesopotamia and the Aegean.⁴ Several private and palace archives, which contain texts that can be dated from the 14th to the beginning of the 12th century BC, provide information on various aspects of life in the kingdom and international relations at the time, including a considerable amount of information relating to vines and wine.

¹ This article is a product of the research project “Bureaucracy and Administrative Procedures in the Syrian Kingdom of Ugarit (14th to 12th centuries B.C.)” (FFI2015–67357–P) (MINECO/FEDER, UE), funded by the Spanish Ministry for Economic Affairs and Competitiveness within the National Plan for Scientific Research, Development and Technological Innovation (I+D+I). We wish to express our thanks to Wilfred G. E. Watson for translating the manuscript into English.

² By the Mission archéologique syro-française de Ras Shamra – Ougarit, since 1999 (Matoïan 2016).

³ On the history of Ugarit see Singer 1999 (republished in Singer 2011: 19-146); Freu 2006; van Soldt 2014.

⁴ On the archaeology of Ras Shamra-Ugarit see, for example, Yon 2006; Yon 2014; Al-Maqdissi and Matoïan 2008; Matoïan 2016.

2. Terminology

From the purely terminological aspect some literary texts, letters and legal texts, but especially administrative documents, use two terms to refer to vineyards, namely in the alphabetic cuneiform script *krm* and in the Mesopotamian cuneiform script the logogram GIŠ.GEŠTIN.⁵ Other possible terms for “vineyard” and “(vine-)stock” are alphabetic *š*, logographic GIŠ.(MEŠ) “tree, plant, (vine-)stock”,⁶ alphabetic *gpn*, logographic A.ŠÀ “(vine-)stock, vine, vineyard”.⁷ In the literary texts there are other possible terms for “vineyard” which are the subject of considerable debate.⁸

There is also a series of Ugaritic words for “bunch, cluster”, “grape(s)” or “raisin”:

<i>ḡnb</i>	“grape(s)”	DUL 318; Zamora 2000, 211
<i>q l</i> (II)	“vine blossom” (?) metaph. for “choice wine”	DUL 681; Zamora 2000, 201
<i>šmq</i>	“raisin”	DUL 775; Zamora 2000, 216
<i>šr</i> ´	“vine shoot” (?)	Zamora 2000, 198
<i>utkl</i>	“bunch, cluster”	DUL 122; Zamora 2000, 208

Otherwise, there are terms for various beverages made from the grape, such as wine of various kinds, vinegar and must:

Alphabetic script	Logographic-syllabic script		
<i>ḥmš</i>		“vinegar”	DUL 359; Zamora 2000, 317
<i>ḥmr</i>	KAŠ	“(sparkling?) wine”	DUL 390; Zamora 2000, 145, 306, 308
<i>mrt</i>		“wine” (?), “must”	DUL 571; Zamora 2000, 249
<i>msk</i>		“mixture, mixed wine, mixed drink”	DUL 575; Zamora 2000, 510
<i>trt</i>		“must”, “new wine”	DUL 867; Zamora 2000, 241
<i>yn</i>	GEŠTIN	“wine”	DUL 954

⁵ DUL 451; Zamora 2000: 58. One of the most remarkable and significant features of Ugaritic administrative texts is the interaction between alphabetic and logographic-syllabic scripts. The clear-cut distinction that seemed to exist in this genre between scripts and languages is currently disappearing; on this see Malbran-Labat 1999; Roche 2010.

⁶ DUL 183; Zamora 2000: 190.

⁷ DUL 301.

⁸ Zamora 2000: 70-72.

Also, we know at least one occupation connected with vineyards, which is *ngr krm* “guardian(s) of the vineyard”.⁹ Additional terms that could denote other professions connected with vineyards and wine remain uncertain and disputed.¹⁰

3. Physical geography

The texts also reflect the physical geography of the Kingdom of Ugarit, where conditions were very favourable for the cultivation of the vine. Set on the Levantine coast and benefiting from a favourable Mediterranean climate,¹¹ the Kingdom of Ugarit is conspicuous for its rich agriculture, partly based on the famous trilogy of wheat, olive-trees and the vine.¹² According to the Mari archives, the region of Ugarit had produced wines since the 18th cent. BC. The dossier concerning Zimrî-Lîm’s journey to Ugarit (ZL year 9’ = 10) mentions Utnâyum and Ulme, alongside Ugarit, among the places that produce wine.¹³ For the Late Bronze Age, the texts from Ugarit show that the vine had an important role in agriculture, alongside the cultivation of cereals and olive trees. Thus, vineyards belong to the categories of land mentioned in the properties owned by the kingdom, alongside olive groves, woods, oak groves, saltworks. The farms, vineyards and olive groves were concentrated in the valleys of the rivers Rahbanu and Nahrayu.¹⁴ The first river is identifiable as present-day Nahr el-Kebir; several proposals have been made for the second: either Nahr el-Fidd, in the neighbourhood of the capital, or Nahr el-Abyad, a tributary of the Orontes, or even Nahr Zegharo, a tributary of Nahr el-Kebir. Geo-environmental studies indicate that higher regions (hills, low mountains) are more suitable for growing vines than coastal plains, which are overloaded with humidity in summer.¹⁵ In a study of the countryside made in the 1930’s, J. Weulersse specifies that:

“La vigne pousse bien sur le littoral, mais l’humidité de l’été y est funeste aux grappes qui moisissent ou mûrissent mal. Dans la montagne, au contraire, la vigne est chez elle ; elle y vient spontanément et donne sans effort de magnifiques récoltes. Sa réputation est ancienne : au temps de Strabon elle recouvrait entièrement le massif jusque vers ses hauts sommets¹⁶ et Laodicée exportait ses vins jusqu’en Égypte”.¹⁷

⁹ Mentioned in the mythological text KTU 1.92:20’ (RS 19.039+; see the re-edition in Pardee 2008) and in the administrative texts 4.141:III:17 (RS 15.022+) and 4.609 (RS 19.016; re-edited by Pardee 1999). See also DUL 32: 617; Zamora 2000: 107-110. Texts which have numbers beginning with “4.” are classified as “Economic Texts” in the edition in KTU³.

¹⁰ Zamora 2000: 110.

¹¹ Geyer 2012, especially the chapter entitled “Un climat et un paléoclimat fondamentalement méditerranéens”.

¹² This “trilogie méditerranéenne” has existed since the 3rd millennium, as shown by the texts from Ebla (cf. Brun 2004: 45).

¹³ van Soldt 2005: 148-149; Chambon 2009: 12, 33, 114-116.

¹⁴ Lackenbacher 2002: 217-218.

¹⁵ Geyer 2017.

¹⁶ However, according to B. Geyer (personal communication, 12th November 2017), it is not very likely that vines would have been easy to cultivate right on the highest summits, where the winter cold would prevent them from growing.

¹⁷ Weulersse 1940: 323.

Studies of the historical geography based on Ugaritic texts show a more significant concentration of place names based on wine-growing and vine-growing in the regions furthest inland.¹⁸ Moreover, some inhabitants of the coast could own vineyards in other regions. Therefore, from the text 4.424 (RS 18.296, line 5), discussed below, it would appear that an inhabitant of the coastal establishment of Ra'su (possibly Ras Ibn Hani) owned vineyards in Šubbanu, a village not included in the metropolitan district but incorporated into the northern part of “district 6”, which lies east of Ugarit according to Wilfred van Soldt (2005: 94).

Today, the environmental data concerning the ancient flora of Ugarit still remain limited, as we have already emphasised.¹⁹ Even so, the results of an archaeo-botanical study have recently made it possible to identify grapes (*Vitis vinifera*) in one of the storage jars unearthed in the “Palais Sud” (or “Maison de Yabninu”), dating to the Late Bronze Age.²⁰

The texts from Ugarit never describe either the vine or grapes and, as a recent study has shown, iconography is relatively poor in this respect.²¹ Positively identified representations of grapes are associated with small objects considered to be imported from Egypt, with an iconography that is typically Egyptian. The images in question are two sets of faience objects: beads and pendants in the shape of grapes, where the colour is blue-grey. Could this be a reference to the kind of wine drunk in Ugarit, i.e. red wine? It is impossible to tell.

A final but schematic image is inscribed in a complicated scene which again refers to Egyptian iconography. On an alabaster vase (RS 15.239) with the name of Niqmaddu, the decoration of the baldachin includes a frieze depicting bunches of grapes in imitation of the royal or divine baldachin depicted in Egypt. To our knowledge, this is the only image in the iconographic repertoire of Ugarit that associates the image of grapes and a climbing vine with a scene where the actors are involved in manipulating or consuming a liquid, possibly wine.²²

All the texts that mention or deal specifically with vines and wine enable us to glimpse aspects relating to the trade in and administration of wine in a Syrian kingdom of the Late Bronze Age. Other aspects concern the consumption of wine and its associated ideology, how it was drunk (banquets, intoxication), its use in the cult and the connection of the vine and wine with fertility.²³

Of the topics and aspects sketched out above, the present contribution will focus on the information provided by the texts concerning the specific matter of the management of wine by the central administration of the kingdom. Whenever possible, this information will be supplemented by archaeological data.

4. Textual sources

While occasionally supplemented by letters, legal texts and rituals, the main written sources for the administration of wine in Ugarit are the administrative or economic texts.

¹⁸ Zamora 2000: 182 (map).

¹⁹ Matoian 2013: 62.

²⁰ Matoian *et al.* 2013: 450 (identified by L. Herveux). This research has been carried out within the framework of the ANR PaléoSyr which involves the study of palaeo-environments and the occupation of lands in Western Syria during the Holocene Period.

²¹ Matoian 2013.

²² Desroches-Noblecourt 1956 for the *editio princeps*, and most recently: Matoian, in press.

²³ Zamora 2000: 505-686; Zamora 2005. Concerning the iconography, see Zamora 2000; Caubet 2013; Matoian 2013.

Administrative texts have been found both in Ras Shamra and in neighbouring Ras Ibn Hani, practically in every single archaeological campaign, in all the archives from the royal palace and in all the houses in the city where texts were found. As already noted above, they are written, on the one hand, in Akkadian (at least apparently) and Mesopotamian logographic-syllabic cuneiform script; and on the other hand, in Ugaritic language and alphabetic cuneiform script.²⁴ With almost 1200 texts and fragments, the administrative genre is the category of text best represented in the corpus of Ugarit. The number of administrative texts in the alphabetic script found so far in Ras Shamra and in Ras Ibn Hani has risen to about 1000, with some 200 in the logographic-syllabic script.²⁵

The total number of administrative texts from Ugarit concerning wine is approximately 45 documents, two of which are labels.²⁶ Of this total, 35 texts are written using the local cuneiform alphabet, and the other 10 are in the logographic-syllabic script. These documents were found in various points of Ras Shamra, but most of them come from the royal palace, 25 of which are alphabetic and only three are logographic-syllabic.

On the other hand, the significance of certain rituals for our subject should be stressed. Sometimes, it seems particularly difficult to classify a text either as “administrative” or as a “ritual”. On this occasion, it can be noted to what extent organising a rite and providing the material needed to carry out that rite are, in certain cases at least, two sides of the same coin.²⁷ This explains why these two activities often produce texts that are similar, or even identical, as will be seen below in respect of text 1.91 (RS 19.015).

5. “Vineyard”, “wine”, and “jar” in the administrative texts

The vocabulary set out above relating to the vine, grapes, wine, etc. comprises the main vocabulary on this topic found in the complete corpus of Ugaritic texts. However, not all these terms are used in the administrative documents. The word *gpn* “(vine-)stock, vine, vineyard”, for example, is found only in myths and legal texts;²⁸ *gnb* “grape(s)”, only in literary texts,²⁹ and *trt* “new wine” only in an incantation for medical treatment (in synonymous parallelism with *yn* “wine”).³⁰ For liquids extracted from grapes the literary texts include metaphors such as *dm šm* “juice of vines”.³¹

In the administrative texts dealing with wine, there are only three key terms: *krm*/GIŠ.GEŠTIN “vineyard”, *yn*/GEŠTIN “wine”, and *kd*/DUG³² “jar”.

The term *kd*, usually translated as “jar”, denotes a measure of capacity mainly for liquids (wine, oil, vinegar), but also for other products such as honey, dregs or cumin.³³

²⁴ Cf. note 5 above.

²⁵ See the numbers provided for each genre by Hawley, Pardee and Roche 2015: 232. The ensemble of administrative texts in Ugaritic language was recently compiled in the edition KTU³ (2013), chapter 4 (“Economic Texts”), which gathers a total of 872 texts and fragments. Most of these texts were translated into English by McGeough 2011.

²⁶ Besides the texts noted by Zamora 2000: 473-474, there are now two additional administrative texts, namely, RS 94.2276:12’ (RSO 18, 109, no. 47; on this see Watson 2017) and RS 94.2600:3 (RSO 18, 113, no. 48).

²⁷ On this see Zamora 2000: 469-470; Vita 2013: 410-412; Vita and Matořan, in press.

²⁸ DUL 301.

²⁹ DUL 318.

³⁰ DUL 867.

³¹ DUL 183, 270.

³² For DUG see also RS 94.2276.

³³ DUL 424-425. For vinegar see also RSO 18 no. 61, for cumin RSO 18 no. 82.

It's use is typical of the morphosyntax of administrative texts: the actual quantity (in this case, *kd*) is only written when it refers to one or two units, in the singular (*kd*) or dual (*kdm*) respectively of the term; when the units are three or more, *kd* is elided. See, for example, lines 6-7 of the text 4.285 (RS 17.287):

6	šdyn arb' yn	PN ₁ : four (jars) of wine
7	abškn kdm yn	PN ₂ : two jars of wine

In other texts, when the number of jars is either one or two, the name of the product is also elided; in such cases, we can only determine which product is intended when more than three jars are mentioned in the same text. For example, in lines 6 and 10-11 of text 4.149 (RS 15.039):

6	kd 1 kblbn	One jar (of wine) for PN ₁
	...	
10	šb' yn	seven (jars) of wine
11	1 mrynm	for the <i>maryanūma</i>

Zamora (2003a) proposed identifying the *kd* (which would contain about 11 litres) with the so-called “Canaanite jar”, a container used for transport (or an amphora) typical of the Levant. The “Canaanite jar” is one of the most frequently occurring shapes found in the range of pottery of Ugarit.³⁴ As yet, a complete corpus of finds has not been drawn up, but it can be estimated as comprising over a thousand items.³⁵ This shape, both common and well-known, has not been the subject of a special study, and since few intact ceramics have been found³⁶ and only a few have been reassembled and restored,³⁷ there are very few complete profiles when all is said and done. Most publications provide only indicative components (essentially necks and bases).³⁸ As a general rule, the discovery of the “dépôt aux 80 jarres” in Minet el-Beida is cited and taken into account in these studies. The only pot from this group that has been identified so far (in the collections of the Louvre Museum)³⁹ has been the object of a volumetric study, its capacity being estimated as approximately 13 litres.⁴⁰

The “Canaanite jar” can be considered as the most common vessel for transporting commodities in Ugarit, which does not exclude that other types of containers could have been used for the same purpose. In the Late Bronze Age, this vessel represents the

³⁴ Studies show that there were variations in the capacity of these carrying jars (from single to double). Zamora 2003a: 242, refers to information given by J.-C. Courtois indicating variations between 10 and 20 litres.

³⁵ It is difficult to make an exact calculation since the finds made during the excavations under the direction of Claude Schaeffer are far from being itemized completely (cf. Al-Maqdissi and Matoïan 2008). For an appraisal of finds of “Canaanite jars” in the eastern Mediterranean, see, for example, Knapp and Demesticha 2017: 65.

³⁶ Cf. Schaeffer 1949: fig. 57: 11, fig. 85: 13, fig. 86: 5, 7, 10.

³⁷ Cf. Yon, Lombard and Renisio 1987: 100, fig. 81: 81/889; Mallet and Matoïan 2001: 168, fig. 16: 86.5265; Monchambert 2004: fig. 56: 826.

³⁸ Cf. Courtois 1978: fig. 23.

³⁹ RS 3.257, Louvre AO 14876 : cf. Sauvage 2015.

⁴⁰ Zamora 2003a; Sauvage 2015.

container par excellence used in cargo ships in the Eastern Mediterranean,⁴¹ even if volumetric analyses do not indicate rigorous standardisation.⁴²

In the absence of a systematic study of the corpus from Ugarit and of a volumetric analysis of this type of pottery, the data available today do not provide accurate enough information to define the value of the *kd* with any certainty. Here, as a working hypothesis, we accept the proposal made by Zamora, which matches the evidence from the “dépôt aux 80 jarres” found in Minet el-Beida (see *supra*).⁴³

Finally, we should note that, besides the archaeological discoveries, the iconographical repertoire of Ugarit includes two images of jars that could correspond to the type called the “Canaanite jar”. The first appears in a complex composition, alongside a scene in which two persons are involved in an action that, very probably, relates to the handling and consumption of a liquid (possibly wine).⁴⁴ The second representation is part of a scene depicting transportation, an exceptional theme in Ugarit.⁴⁵

6. The administration of wine

The administration of wine is a topic that has already been discussed in publications by scholars such as Milano (1981), Liverani (1989, 144-146), and Heltzer (1990). The most complete work on the subject, however, is José-Ángel Zamora’s book *La vid y el vino en Ugarit* (“The vine and wine in Ugarit”), published in 2000.⁴⁶ It provides a detailed analysis of the principal administrative texts concerning wine, as well as attempting to unravel the principal administrative machinery underlying the documentation that it created. Here it will be both our mainstay and our principal guide in the following discussion.

Zamora presents the textual documentation in a series of categories and subcategories.⁴⁷ Here we have adopted a more simplified structure, in four sections focusing on 1) texts that are registers of vineyards, 2) texts concerning deliveries of wine to the administration, 3) texts concerning supplies of wine from the administration, and 4) texts concerning the storage of wine.

6.1 Registers of vineyards

Text 4.424 (RS 18.296), which has at least 23 lines, most of which are damaged, can be classified as a “cadastral” document.⁴⁸ The first line shows that it is an inventory of fields or lands belonging to inhabitants of the coastal village of Ra’su. The remaining lines of the document have two main formulae: 1) Lands in GN for PN, and 2) Lands belonging to PN₁ for PN₂. In other words, either the current beneficiary of a land is noted or a change of ownership is recorded:

1 spr[.]šd . ri[šym ...]

Record of the fields of

⁴¹ Knapp and Demesticha 2017: 65.

⁴² Knapp and Demesticha 2017: 47.

⁴³ Others prefer the interpretation by Heltzer 1990 (22 l). The study of Canaanite jars in the cargo of the Uluburun shipwreck shows that these jars may be classified into three main categories on the basis of their capacity: 6·7 l, approx. 13 l and 26·7 l. It is this last value that C. Pulak accepts for the *kd* (Pulak in Aruz *et al.* 2008: 317-319).

⁴⁴ Sceau-cylindre RS 7.120: Amiet 1992: no. 204; Matoian 2013.

⁴⁵ Sceau-cylindre RS 6.307: Amiet 1992: no. 258.

⁴⁶ Unfortunately it is not cited in the section on Ugarit in the article recently published by Stol 2016: 41.

⁴⁷ Cf. Zamora 2000: xii-xiii.

⁴⁸ Zamora 2000: 73-84.

	(the people from) G[N]:
2 kr'm[. w] . š'r'd'm[.]'x[...]	one vineyard [and] two fields ...
3 b gt tm-[.]l xtyn[...]	in Gittu-GN to NP ...
<hr/>	
4 [...] . k'r'm . b . yp' l . y'dd	[...] vineyard in GN to PN
...	
23 krm . i'b'(?)[r] 'd' . l . 'b'n'[.] 'n'r'd'bn	vineyard of PN ₁ to PN ₂

There is no indication of dimensions for the fields and vineyards recorded: the document registers the existence of these lands, not their size. In fact, the entries in the texts seem to comprise a basic extract of the information contained in well-known legal documents in Ugarit: legal texts recording acts of transfers of property ratified by the king in which he grants to certain individuals the properties of others.⁴⁹ The primary purpose of text 4.424 could be to summarise or enact the situation of a particular village in the kingdom in which there had been changes of the ownership of fields and vineyards.⁵⁰ Its ultimate purpose could have been the control of produce from these lands for the purposes of tax or organisation.

A second administrative text, 4.244 (RS 16.396), deals exclusively with vineyards located in various regions of the kingdom.⁵¹ Also quite damaged, the entries have the following two main formats: 1) a number of vineyards is delivered in connection with a place or a person (GN/PN + numeral + *krm(m)*), 2) a number of vineyards is delivered with information about person and place: numeral + *krm* + PN + *b* “in” + GN. For instance:

- 9 tlt . krm . ubdym . l mlkt . b . 'nmky[...]
Three leased vineyards for the queen in GN
- 10 mgdly . glpṭr . tn . krmm . w . tlt . ub'd'[ym]
GN: PN two vineyards and three leased (vineyards)
- 11 qmnz . tt . krm . ykn'm . tmn . krm-[...]
GN: six vineyards. GN: eight vineyards ...
- 12 krm . n'mn . b . ḥly . ull . krm . aḥ'd'[...]
one vineyard of PN in GN; GN: one vineyard

The text does not record changes or any kind of activity, registering only the actual situation: the location of a vineyard or its owner, or both. The variation in the wording of the entries indicates that the scribe was interested in the actual circumstances of each individual case and not in the total amount recorded. It is quite likely that this document, too, summarises information from other documents. It shows that the administration controlled the ownership of vineyards in the kingdom by means of a regional

⁴⁹ Márquez Rowe 2006.

⁵⁰ Zamora 2000: 83.

⁵¹ Zamora 2000: 84-105; Zamora 2003.

organisation that presupposed a developed administrative apparatus, good knowledge of the terrain and a complex system of control, as well as a clear interest in the cultivation of the vine.

6.2 Deliveries of wine to the administration

Other texts record amounts of wine together with individuals or groups. The text 4.715 (RS 22.348), for example, records quantities of wine associated with various persons from the village of Uškānu.⁵² It does not mention the use to which the wine would be put nor does it includes references to time. Here are some sample lines:

1	uškkn	GN
2	bn . abn . tlt . y'n' [...]	PN: three (jars) of wine [...]

4	bn . inr ar'b' [...]	PN: four [(jars) of wine]

25	pbn ... kd'm' [...]	PN: two jars [of wine]

Another text, 4.93 (RS 11.776+), lists quantities of wine alongside a long list of personal names, each followed by a number.⁵³ The first line, *spr ytnm*, indicates that it is a list of persons belonging to a group or social class called *ytn*, possibly “contributors, sellers”.⁵⁴ The meaning of the numbers can be found in the left-hand margin of the tablet, in a syllabic comment that can be read and restored as 4 *me-at* 48 DUG G[IS.GEŠTIN ŠU.NÍGIN] “448 jars of w[ine in total]”,⁵⁵ i.e. about 5,000 litres of wine.⁵⁶

The two texts 4.715 and 4.93 are ambiguous as to whether they are about wine coming in or going out, not indicating explicitly whether the movement of the wine is “to” or “from” the administration. However, in both the criterion is to note down individuals before each amount of wine. Nor can we tell whether they are deliveries or outgoings on a large scale or documents summarising various deliveries recorded in previous documents. Even so, and as a working hypothesis, we can assume that they are deliveries, contributions by individuals to the administration. In these texts, the absence of prepositions indicating activity by the administration could indicate the reception of amounts of wine, in contrast to the texts considered next, which clearly indicate, by means of a preposition, that they are concerned with distributing amounts of wine.⁵⁷

⁵² Zamora 2000: 361-365.

⁵³ Zamora 2000: 365-372.

⁵⁴ DUL 977.

⁵⁵ Reading following KTU³: 292. KTU²: 247, and Roche 2008: 166, read 4 *me-at* 48 DUG G[EŠTIN ŠU.NÍGIN].

⁵⁶ In Vita, in press, we have tried to suggest an explanation for the possible function of syllabic inscriptions of this type as part of an alphabetic administrative text or as it also appears in text 4.48 (see below). We think that such inscriptions can be understood within the framework of the direct relations maintained between Ugarit and Ḫatti. The position of Ugarit as a vassal kingdom of Ḫatti may have entailed the requirement (or obligation) that Hittite officials could have access to and directly supervise at least the key elements of one section of the Ugaritic administrative documentation.

⁵⁷ Cf. Zamora 2000: 372.

6.3 Supplies of wine from the administration

Another series of texts record, quite clearly, outgoings of wine. The text 4.149 (RS 15.039) may serve as an example of this type of document:⁵⁸

1	šb' yn	Seven (jars of) wine
2	l mrynm	for the <i>maryannūma</i>
3	b ytb mlk	among the assistants of the king. ⁵⁹
<hr/>		
4	kdm . gb išhry .	Two jars (of wine for) the pit of DN.
<hr/>		
5	hmš yn . b ' . ' d	Five (jars of) wine in/for
6	bh mlkt	the sacrifice of the queen
7	b mdr'	in the sown land.
<hr/>		
8	tl̄t̄ bt ' . ' il	Three (jars of wine) (in) the temple of DN.
9	ann	
<hr/>		
10	kd . bt ilm	One jar (of wine in) the house of the great gods.
11	rbm	
<hr/>		
12	kd l išt̄nm	One jar (of wine) for the <i>išt̄nm</i> . ⁶⁰
<hr/>		
13	kd l h̄ty .	One jar (of wine) for the Hittite
14	maḥdh	(at) GN.
<hr/>		
15	kd l kblbn	One jar (of wine) for PN.
<hr/>		
16	kdm . mṭḥ	Two jars (of wine) <i>mṭḥ</i>
17	l . alty	for the Alashiyan.
<hr/>		
18	kd . l mrynm	One jar (of wine) for the <i>maryannūma</i> .

⁵⁸ We follow the re-edition of 4.149 by Pardee 2007, which inverts the identification of obverse and reverse usually accepted in previous editions (but not accepted in KTU³, 316).

⁵⁹ As translated in DUL 980. Instead, Pardee 2007: 73, translates line 3: “lorsque le roi s’assit”; del Olmo and Sanmartín 1998: 190: “für die *m.* unter der Diensthabenden beim König”.

⁶⁰ DUL 116: “members of a (workers?) corporation”.

19 kd . bt . il ann

One (jar of wine) (in) the temple of DN.

Lines 1-3, 15 and 18 record amounts of wine for a class of personnel, the *maryanūma*, and for an individual. This same type of register is found in other administrative texts, such as 4.373 (RS 18.081; see below), or the syllabic text RS 20.425.⁶¹

Lines 4-11 and 19 record quantities of wine intended for temples and ritual sacrifices, that is to say, for the cult.⁶² This is also the only subject matter of 1.91 (RS 19.015), a text usually classified as a ritual, although it is strongly administrative in character. Its heading (lines 1-2) reads: *yn . d . ykl . bd . 'r'[...] b . dbḥ . mlk* “Wine which is to be consumed under the supervision of the *r*[...] during the royal sacrificial rites”;⁶³ it is followed by a long list of types of sacrifices (lines 3-20). The reverse of this tablet (lines 21-34), however, has a series of entries with the structure peculiar to an administrative text: GN + quantity of wine; for example:

21 lbnm . 'šr . yn	GN: ten (jars) of wine
22 ḥlb . gngnt . ṭlt . y[n]	GN: three (jars) of wine
23 bšr . 'šr . yn	GN: ten (jars) of wine
24 nnu 'a`rb' . yn	GN: four (jars) of wine
25 šql ṭlt . yn	GN: three (jars) of wine
26 šmny . kdm . yn	GN: two jars of wine

This section of the text probably mentions the villages of the kingdom that have supplied the wine for this long series of sacrifices, amounting to a total of about 836 litres. With exactly the same structure as these lines (21-34), another administrative text, 4.48 (RS 10.045), has an additional final line in the syllabic script: 1 *me-at* 48 DUG GEŠTIN ŠU.NÍGIN “148 jars of wine in total” (*ca.* 1,628 litres).

Lines 13-14 and 16-17 of 4.149 record quantities of wine for foreigners (a Hittite and a Cypriot). Probably they are foreign messengers or diplomats returning home who are given wine rations as part of the provisions for their journey. Other administrative texts also include entries of this kind: wine for Assyrians (4.373:3), Egyptians (4.373:7.10; 4.213:27, see below) and once again, Hittites (4.216:9 = RS 16.165). Line 2 (the final line) of the syllabic text RS 20.04 runs as follows: 1 DUG GEŠTIN *a-na* ^{lu}DUMU.KIN-*ri* ^{kur}*a-mur-ri* “1 jar of wine for the messenger of Amurru”.⁶⁴ Equally interesting are two similar letters found in Ras Shamra and published recently (2016). In the letter RS

⁶¹ Ug 5, no. 99.

⁶² See also the ritual 1.41:22-23 (RS 1.003; Pardee 2000: 149, 150; 2002: 64: “four[teen] jars of wine”), the parallel passage in 1.87:24 (RS 18.056; Pardee 2000: 472; Pardee 2002: 60), as well as 1.112:12-13 (RS 24.256; Pardee 2000: 633-634; Pardee 2002: 38: “a jar of wine for ‘Attartu Hurri’”; del Olmo 2014: 192). See also the comments made by Zamora 2000, 470, concerning possible connections between the administrative text 4.279 (RS 17.156) and the Ugaritic ritual texts. On elements relating to the cult that appear in the administrative texts from Ugarit see Clemens 2001: 273-469; del Olmo and Sanmartín 1998.

⁶³ Pardee 2002: 215; 2000: 489-491; Zamora 2000: 421-435; del Olmo 2014: 213; DUL 437 (“wine to be consumed, (delivered) into the hands of the *r*[...] in the royal sacrifice”); Vita 2013: 410-411.

⁶⁴ Ug 5, 193, no. 100; Zamora 2000: 381.

94.2951,⁶⁵ an (unidentifiable) king tells a king of Ugarit (not specified) that he is intending to make a journey to Hatti and, for that purpose, asks him to send a certain quantity of good wine (GEŠTIN DUG.GA). Similarly, in the letter RS 94.2598 a king of Byblos criticises a king of Ugarit for not providing food and drink to his messengers in the same way as he himself did to the envoys sent from Ugarit.⁶⁶ The administrative document 4.269 (RS 17.106) is a list of food rations (line 1: *spr ḥpr*) in which rations of various kinds of grain (spelt, barley and wheat) are distributed to different people and professional collectives, and in some cases, wine and vinegar are added.

The set of texts recording deliveries of wine also includes lines 24-30 of 4.213 (RS 16.127), with quantities of various qualities of wine, once again intended for individuals, for a messenger setting out for Egypt, for occupations such as shearers and for sacrifices.⁶⁷

- miṭṭm . yn . ḥsp . d . nkly . b . dbḥ [...]
 25 mit . arbṣm . kbd . yn . ḥsp . l . m [...]⁶⁸
 mit . ṣrm . ḳḳbd . yn . ḥsp . l . yḳb [...]
 ṣrm . yn . ḥsp . l ql . d . tbṣ . mṣṣrṣm
 mit . arbṣm . kbd . yn . mṣb
 l . mḍrglm
 30 ṣrm . yn . mṣb w [.] ḥṣṣ[p] . l . gzzm
- 24 200 (jars) of *ḥsp*-wine, consumed on the occasion of the sacrifice [...].
 25 140 (jars) of *ḥsp*-wine for [...].
 26 120 (jars) of *ḥsp*-wine for [...].
 27 20 (jars) of *ḥsp*-wine for the messenger who went to Egypt.
 28-29 140 (jars) of *mṣb*-wine for the *mḍrglm*.
 30 20 (jars) of *mṣb*-wine [...] for the shearers.

However, lines 1-23 record quantities of wine found in various locations of the kingdom, including the much-discussed *gittu* (which can be translated more or less as “wine or olive press” and, by extension, “farmstead, estate”)⁶⁹. Wine is also graded by quality and condition⁷⁰. The first three lines of the text can serve as an example:

- 1 ḥmṣ . ṣr . yn . ṭb 15 (jars of) select wine,

⁶⁵ Lackenbacher and Malbran-Labat 2016: 143, no. 74.

⁶⁶ Lackenbacher and Malbran-Labat 2016: 101, no. 49. The beverage is denoted by the ideogram KAŠ which, in this context, most probably has to be understood as “wine”; see Lackenbacher and Malbran-Labat 2016: 176.

⁶⁷ Zamora 2000: 435-448; Vita 2016: 141.

⁶⁸ KTU³, 342: m[lk].

⁶⁹ Cf. DUL 307.

⁷⁰ On the various qualities of wine see Zamora 2000: 305, 453-467, 663-664.

2 w . tš' m . kdm . kbd . yn . d . l . t̃b 92 jars of ordinary wine,
 3 w . arb' m . yn . ḥlq . b . gt . sknm and 40 (jars of) spoilt wine in the *gittu* of
 the governor.

Lines 1-23 cover a wide area of the kingdom of Ugarit. This section of the text is static in nature and is reminiscent of the “official registers of vineyards” that we saw earlier: the quantities are noted with the practical purpose of knowing how much wine was available in the places mentioned.⁷¹ It is likely that the two parts of the text (lines 1-23 and 24-30) are connected, but it also seems evident that each was written for a different purpose. In any case, this text could be a good indication that the administration considered the system of supplies and deliveries as interrelated, and probably mutually dependent.⁷²

This type of documentation should also include some labels, for example, 6.11 (RS 5.262), *k'd' [.] 'y'n l pr̃* “One jar of wine for PN”, or RS 22.30 *'kur-wa-na 2 DUG GEŠTIN* “(For) PN two jars of wine”.⁷³

To summarise, the recipients of the principal deliveries of quantities of wine is a series of individuals whose duties or function remain unknown, groups of various professions, messengers and diplomats (both Ugaritian and foreign), as well as wine intended for various rituals. Most of these texts contain no chronological indications of any kind, but at least two of them indicate the month in which the operation is carried out.⁷⁴

In addition to the texts discussed above, another series of administrative texts (cf. 4.123 [RS 13.014], 4.284 [RS 17.285], 4.663 [RS AO 21088]) allows us to deduce that, although produced quite copiously, in Ugarit, wine was considered to be a very valuable commodity that could even be considered as part of prestige goods.⁷⁵

6.4 Storage of wine

Deliveries of wine, either to the palace or to the central administration, entails the problem of the storage of wine in Ugarit, both in the royal palace and in the houses of the city. While a reading of the preliminary excavation reports reveals the discovery, in the palace building, of a “magasin rempli de très grandes jarres, la plupart effondrées sur place lors de l’incendie du palais”,⁷⁶ we have to admit that the information enabling us to complete this simple mention remains limited. Several points are worth remembering at this juncture:

The sector of the “magasins” corresponds, on the one hand, to *loci* 89 and 90 in the south-eastern part of the palace and, on the other hand, to *loci* (unnumbered on the map in *Ugaritica* IV) which are in a building that is outside the palace itself (to the south of *loci* 58, 60, 61, 62 and to the east of *locus* 89).

An analysis of the architecture of the palace is in progress⁷⁷ and the first studies that have been published have not yet dealt with the question of storage spaces.

⁷¹ Zamora 2000: 448. Similarly, see also the text 4.400 (RS 18.139).

⁷² Zamora 2000: 442, 446.

⁷³ van Soldt 1989: 381 no. 40; Zamora 2000: 331; Zamora 2004: 208, 210-211.

⁷⁴ Texts 4.246 (RS 16.398) and RS 20.425.

⁷⁵ Zamora 2000: 408.

⁷⁶ Schaeffer 1954: 23.

⁷⁷ Margueron 1995.

With regard to the furniture, the results of an analysis of the archives connected with the excavation of this sector as well as research conducted in museums, published in the volume RSO 17,⁷⁸ have shown to what extent the information that could be correlated with the storage of liquid commodities (in particular wine and oil) is poor in quality.

First, it must be remembered that some of the pottery mentioned in the archives or in publications has not yet been located in the museums.⁷⁹ A single jar (as yet not located in any of the museums) is recorded in the inventories: a “two-handled amphora” (RS 14.269), with a height of 1.15 m, found at topographical point 260 (*locus* 35).

Second, the lack of information about the “grandes jarres” from the “magasins” of the palace must be emphasised.⁸⁰ In fact, most of the topographical points given in the various *loci* of the “magasins” correspond to finds of various objects⁸¹ and, in some cases, to blocks of material (lead, bronze, “Egyptian blue”). Only two topographical points, located in the building to the south of the palace, are connected with the find of a “grande jarre”. These are the topographical point 272, which corresponds to a “grande jarre couchée et incomplète” (at a depth of 2.20 m), and the topographical point 1478, which corresponds to the discovery of a “grande jarre écrasée” (at a depth of 1.30 m). Also worth mentioning is the discovery, at topographical point 1536, of a “culot de jarre pointu” (at a depth of 0.50 m), a description that probably corresponds to the base of an amphora.

In 2008, we had envisaged that the excavator had not preserved the pottery (following a selective procedure). We are now presented with another hypothesis in view of the finds made in 2009 in the “Palais Sud” (or “Maison de Yabninu”). When study of this building was resumed (as preparation for a detailed publication), work on the ground has shown, in fact, that the large storage jars (or *pithoi*) of rooms 216 and 219, brought to light in the mid-twentieth century, had been preserved *in situ*.⁸² Above, we have already noted that Linda Herveux had identified grape seeds in one of these jars.

In our opinion, therefore, it is likely that the jars in the large rooms (89 and 90) to the south of the “jardin” of the royal palace, are still there. Their careful removal and their analysis in the laboratory would certainly allow us to acquire valuable information about their contents.⁸³

In the various sectors of the city, other buildings have yielded storage jars (with varying contents, including *pithoi*), among them the “maison aux jarres” from the slope to the east of the tell, “bâtiment B” from the area “Grand-rue”, “maison A” and “maison C” in the “Centre de la Ville”, the “maison aux albâtre”. Quite often, the material from these dwellings also includes several “Canaanite jars”. While the containers with large capacities are found in the spaces on the ground floor, the “Canaanite jars” could also be stored on the first floor. As an example, it can be noted that the domestic pottery of

⁷⁸ Matoïan 2008.

⁷⁹ As we have emphasised, it would seem that the excavator did not preserve all the pottery that was unearthed.

⁸⁰ Al-Maqdissi and Matoïan 2008: 129.

⁸¹ Besides tablets, weights, parts of armour and bronze weapons: arrowheads and spearheads, fragments of vases chiefly of Mycenaean or Cypriot ware, amber and stone beads, an ivory knob, a large shell, a sculpted head etc.

⁸² Matoïan *et al.* 2013: 450.

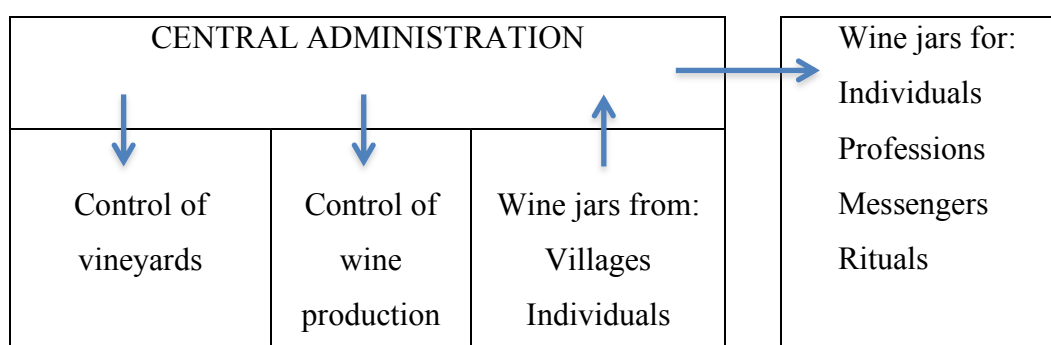
⁸³ Towards the end of 2008, V. Matoïan had proposed that one of the programmes of the Mission archéologique syro-française de Ras Shamra-Ougarit should focus on the areas in the royal palace that had not been completely cleared by C. Schaeffer.

the house situated to the south of the “temple aux rhytons” comprised 5 *pithoi* and around 70 “Canaanite jars”, many of which were probably stored on the first floor.⁸⁴

The lacunae in the archaeological evidence, including the lack of information about the contents of the storage jars for the transport, and the lack of laboratory analyses, restrict our interpretation. It is very likely that reserves of wine were stored in the palace complex, in other buildings in the capital and in its main harbour as well as in the places where wine was produced.⁸⁵ We hope that future research will confirm these hypotheses.

7. Conclusions

The Ugaritian administration seems to have managed the wine industry using a system that, on the one hand, tried to have thorough and strict control both of the vineyards and of the wine (and their qualities) stored in various places and villages in the kingdom, and on the other hand, it closely controlled both the receipt and the issue of quantities of wine measured by the *kd* or “jar”, which contained approximately 11 litres. The system can be outlined by the following diagram:



However, it is more likely that we only know a part of the administrative process that we have just outlined, since the documentation preserved is only a small part of what would have been required to control the administration of wine in Ugarit.⁸⁶

Abbreviations

- DUL: del Olmo Lete, G., and Sanmartín, J. 2015. A Dictionary of the Ugaritic Language in the Alphabetic Tradition, Leiden.
- KTU²: Dietrich, M., Loretz, O. and Sanmartín, J. 1995. The Cuneiform Alphabetic Texts from Ugarit, Ras Ibn Hani and Other Places (KTU : second, enlarged edition), Münster.
- KTU³: Dietrich, M., Loretz, O. and Sanmartín, J. 2013. Die keilalphabetischen Texte aus Ugarit, Ras Ibn Hani and Other Places, Münster.
- RSO 17: Matoïan, V. (ed.) 2008. Le mobilier du Palais royal d'Ougarit, Ras Shamra – Ougarit XVII, Lyon.

⁸⁴ Mallet and Matoïan 2001.

⁸⁵ Note the very different situation in Mari: “L’intégralité des réserves de vin ne se trouvait pas dans l’espace palatial, ni même dans la ville de Mari. Des localités plus ou moins éloignées possédaient leurs propres entrepôts, par lesquels le vin transitait un certain temps, ou restait en réserve” (Chambon 2009: 21).

⁸⁶ Zamora 2000: 410.

- RSO 18: Bordreuil, P., Pardee, D. and Hawley, R. 2012. Une bibliothèque au sud de la ville. Textes 1994-2002 en cuneiforme alphabétique de la Maison d'Ourtenou, Ras Shamra – Ugarit XVIII, Leuven.
- Ug 5: J. Nougayrol, E. Laroche, Ch. Virolleaud, and C. F. A. Schaeffer 1968. Ugaritica V, Paris.

Bibliography

- Al-Maqdissi M. and Matoïan V. 2008. “La céramique découverte par C. Schaeffer dans le Palais royal d'Ougarit : remarques générales”, in V. Matoïan (ed.), *Le mobilier du Palais royal d'Ougarit, Ras Shamra – Ougarit XVII, Maison de l'Orient et de la Méditerranée*, Lyon: 127-155.
- Amiet, P. 1992. *Sceaux-cylindres en hématite et pierres diverses, Ras Shamra – Ougarit IX*, Paris.
- Aruz, J., Benzel, K., Evans, J.M. 2008. *Catalogue d'exposition : Beyond Babylon, Art, Trade, and Diplomacy in the Second Millenium B.C.*, New York.
- Brun, J.-P. 2004. *Archéologie du vin et de l'huile de la Préhistoire à l'époque hellénistique*, Éditions Errance, Paris.
- Caubet, A. 2013. “Of Banquets, Horses and Women in Late Bronze Age Ugarit”, dans J. Aruz, S.B. Graff and Y. Rakie (eds.), *Cultures in Contact. From Mesopotamia to the Mediterranean in the Second Millenium B.C.*, The Metropolitan Museum of Art, New-York: 226-237.
- Chambon, G. 2009. *Les archives du von à Mari, Mémoires de N.A.B.U.*, Paris.
- Clemens, D.M. 2001. *Sources for Ugaritic Ritual and Sacrifice*, Bd. I, AOAT 284/1, Münster.
- del Olmo Lete, G. 2014. *Canaanite Religion According to the Liturgical Texts of Ugarit*, AOAT 408, Münster.
- Desroches-Noblecourt C. 1956. “Interprétation et datation d'une scène gravée sur deux fragments de récipient en albâtre provenant des fouilles du palais d'Ougarit”, in C.F.-A. Schaeffer (dir.), *Ugaritica III, Mission de Ras Shamra VIII*, Paris: 179-220.
- Freu, J. 2006. *Histoire politique du royaume d'Ougarit*, Paris.
- Geyer B. 2012. “Les ressources en eau et les aménagements hydrauliques en Ougarit : état de la recherche”, in V. Matoïan, M. Al-Maqdissi and Y. Calvet (eds.), *Études ougaritiques II, Ras Shamra – Ougarit XX*, Louvain: 11-18.
- Geyer B. 2017. *Climat et variabilité dans la région de Ras Shamra-Ougarit*, in V. Matoïan (ed.), *Archéologie, patrimoine et archives I, Les fouilles anciennes à Ras Shamra et à Minet el-Beida, Ras Shamra – Ougarit XXV*, Leuven: 393-401.
- Hawley, R., Pardee, D., and Roche, C. 2015. “The Scribal Culture of Ugarit”, *Journal of Ancient Near Eastern History* 2: 229-267.
- Heltzer, M. 1990. “Vineyards and Wine in Ugarit (Property and Distribution)”, *Ugarit-Forschungen* 22: 119-135.
- Knapp A.B. and Demesticha S. 2017. *Mediterranean Connections. Maritime Transport Containers and Seaborne Trade in the Bronze and Early Iron Ages*, New York – London.
- Lackenbacher S. 2002. *Textes akkadiens d'Ougarit, Littératures Anciennes du Proche-Orient* 20, Paris.
- Lackenbacher, S. and Malbran-Labat F. 2016. *Lettres en akkadien de la 'Maison d'Urtēnu'. Fouilles de 1994, RSO XXIII*, Leuven.

- Liverani, M. 1989. "Economy of Ugaritic Royal Farms", in C. Zaccagnini (ed.), *Production and Consumption in the Ancient Near East*, Budapest: 127-168.
- Malbran-Labat, F. 1999. "Langues et écritures à Ugarit", *Semitica* 49: 65-101.
- Mallet J., Matoïan V. 2001. "Une maison au sud du 'temple aux rhytons'. Fouilles 1979-1990", in M. Yon et D. Arnaud (eds.), *Ras Shamra-Ougarit XIV, Études ougaritiques*, Paris: 83-182.
- Al-Maqdissi, M. and Matoïan, V. (eds.) 2008. "L'Orient des palais". *Le Palais royal d'Ougarit au Bronze récent*, Damas.
- Margueron J.-Cl. 1995. "Le palais royal d'Ougarit, premiers résultats d'une analyse systématique", in M. Yon, M. Sznycer et P. Bordreuil (eds.), *Le pays d'Ougarit autour de 1200 av. J.-C., Actes du Colloque International*, Paris, 28 juin - 1^{er} juillet 1993, *Ras Shamra-Ougarit XI*, Paris: 183-202.
- Márquez Rowe, I. 2006. *The Royal Deeds of Ugarit. A Study of Ancient Near Eastern Diplomats*, AOAT 335, Münster 2006.
- Matoïan V. (ed.), 2008. *Le mobilier du Palais royal d'Ougarit, Ras Shamra – Ougarit XVII*, *Maison de l'Orient et de la Méditerranée*, Lyon.
- Matoïan V. 2013. "Du vin pour le délice de l'assoiffé", in O. Loretz, S. Ribichini, W.G.E. Watson and J.-A. Zamora (eds.), *Ritual, Religion and Reason. Studies in the Ancient World in Honour of Paolo Xella*, AOAT 404, Münster: 61-76.
- Matoïan, V. 2016. "La mission archéologique de Ras Shamra – Ougarit aujourd'hui", *Les Nouvelles de l'archéologie* 144: 38-42.
- Matoïan V. in press. "Le roi et la 'quête' d'éternité : Réflexion à propos du vase inscrit au nom de Niqmaddu (RS 15.239)", *Ugarit-Forschungen* 48.
- Matoïan V., Al-Maqdissi, M., Haydar, J., Al-Bahloul, K., Benech, C., Bessac, J.-C., Bordreuil, E., Callot, O., Carbillet, A., Dardaillon, E., Geyer, B., Goiran, J.-P., Hawley, R., Herveux, L., Marriner, N., Onnis, F., Pardee, D., Rejiba, F., Roche-Hawley, C. and Sauvage, C., with the collab. of V. Asensi-Amoros, P. Carbonel, X. Huang and M. Lecomte, 2013. "Rapport préliminaire sur les activités de la mission archéologique syro-française de Ras Shamra – Ougarit en 2009 et 2010 (69^e et 70^e campagnes)", *Syria* 90: 439-478.
- McGeough, K.M. 2011. *Ugaritic Economic Tablets. Text, Translation and Notes*, Leuven.
- Milano, L. 1981. "Alimentazione e regimi alimentari nella Siria preclassica", *Dialoghi di Archeologia* 3: 85-121.
- del Olmo Lete, G. and Sanmartín, J. 1998. "Kultisches in den keilalphabetischen Verwaltungs- und Wirtschaftstexten aus Ugarit", in M. Dietrich and I. Kottsieper (eds.), „Und Mose schrieb dieses Lied auf“. *Studien zum Alten Testament und zum Alten Orient* (Fs O. Loretz), Münster: 175-197.
- Pardee, D. 1999. "Les hommes du roi propriétaires de champs : les textes ougaritiques RS 15.116 et RS 19.016", *Semitica* 49: 19-64.
- Pardee, D. 2000. *Les textes rituels. Fascicule 1*, *Ras Shamra – Ougarit XII*, Paris.
- Pardee, D. 2002. *Ritual and Cult at Ugarit*, Atlanta.
- Pardee, D. 2007. "RS 15.039 remis sur pied", *JANER* 7: 67-85.
- Pardee, D. 2008. "Deux tablettes ougaritiques de la main d'un même scribe, trouvées sur deux sites distincts : RS 19.039 et RIH 98/02", *Semitica et Classica* 1: 9-38.
- Roche, C. 2008, "Classification de l'utilisation du cunéiforme mésopotamien dans les textes ougaritiques", in R. D. Biggs, J. Myers and M. T. Roth (eds.), *Proceedings of*

- the 51st Reencontre Assyriologique Internationale Held at The Oriental Institute of the University of Chicago. July 18-22, 2005, Chicago: 155-170.
- Roche, C. 2010. "Language and Script in the Akkadian Economic Texts from Ras Shamra", in W. H. van Soldt (ed.), *Society and Administration in Ancient Ugarit*, Leiden: 107-122.
- Sauvage C. 2015. "Nouvelle réflexion sur le 'dépôt aux 80 jarres' de Minet el-Beida", in B. Geyer, V. Matoïan et M. Al-Maqdissi (éds). *De l'île d'Aphrodite au Paradis perdu, itinéraire d'un gentilhomme lyonnais. En hommage à Yves Calvet, Ras Shamra – Ougarit XXII*, Éd. Peeters, Leuven : 63-75.
- Schaeffer C.F.-A. 1954. "Les fouilles de Ras Shamra- Ugarit, quinzième, seizième et dix-septième campagnes (1951, 1952 et 1953), Rapport sommaire", *Syria* 31: 14-67.
- Singer, I. 1999, "A Political History of Ugarit", in W. G. E. Watson and N. Wyatt (eds.), *Handbook of Ugaritic Studies*, Leiden: 603-733.
- Singer, I. 2011. *The Calm before the Storm*, Atlanta.
- Stol, M. 2016. "Wein. A. Mesopotamien", in *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* 15, Berlin: 37-43.
- van Soldt, W. H. 1989. "Labels from Ugarit", *Ugarit-Forschungen* 21: 375-388.
- van Soldt, W. H. 2014. "History", *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* 14/3-4, Berlin: 280-281.
- Vita, J.-P. 2013. "Interactions à Ougarit entre textes administratifs et textes d'un autre genre (lettres, textes juridiques, rituels, étiquettes)", in V. Matoïan and M. Al-Maqdissi (eds.), *Études ougaritiques III*, RSO XXI, Leuven 2013: 403-416.
- Vita J.-P. 2015. "'Magasin' à Ougarit", in B. Geyer, V. Matoïan and M. Al-Maqdissi (éds), *De l'île d'Aphrodite au Paradis perdu, itinéraire d'un gentilhomme lyonnais. En hommage à Yves Calvet, Ras Shamra – Ougarit XXII*, Leuven: 77-80.
- Vita, J.-P. 2016. "Les gzzm 'tondeurs' à Ougarit", in V. Matoïan and M. Al-Maqdissi (eds.), *Études ougaritiques IV*, Ras Shamra – Ougarit XXIV, Leuven: 139-147.
- Vita, J.-P. in press. "Administrative texts in Ugarit between tradition and innovation: analysis of two instances", in I. Kottsieper and H. Neumann (ed.), *Literaturkontakte Ugarits – Wurzeln und Entfaltungen*, AOAT, Münster.
- Vita, J.-P. and Matoïan, V. in press. "Textiles in Ritual and Cultic Practices in Ugarit, (Second Millennium BC, Late Bronze Age)", in S. Gaspa – S. Vigo (eds.), *Textiles in Ritual and Cultic Practices in the Ancient Near East from the Third to the First Millennium BC.*, Copenhagen 2017.
- Watson, W. G. E. 2017. "A Remedy for Equine Bloat?", *Le Journal des Médecines Cunéiformes* 29: 49-53.
- Weulersse J. 1940. *Le pays des Alaouites*, Tours.
- Yon, M. 2006. *The City of Ugarit at Tell Ras Shamra*, Winona Lake.
- Yon, M. 2014. "Ugarit (Ougarit). D. Archäologisch", *Reallexikon der Assyriologie* 14/3-4, 291-295.
- Yon, M., Lombard, P., and Renisio, M. 1987. "L'organisation de l'habitat, Les maisons A, B et E", in M. Yon (ed.), *Le Centre de la Ville, 38^e-44^e campagnes (1978-1984)*, Ras Shamra – Ougarit III, Paris: 11-128.
- Zamora, J.-Á. 2000. *La vid y el vino en Ugarit*, Madrid.
- Zamora, J.-Á. 2003a. "El 'ánfora cananea' y las medidas de capacidad en el Oriente mediterráneo de la edad del Bronce Final", *Spal* 12: 231-257.

- Zamora, J.-Á. 2003b. "El control territorial de la administración ugarítica: el llamado 'catastro' 4.244", in A. González, J.-P. Vita and J.-Á. Zamora (eds.), *De la Tablilla a la Inteligencia Artificial. Homenaje al Prof. Jesús Luis Cunchillos en su 65 aniversario*, Zaragoza: 93-115.
- Zamora, J.-Á. 2004. "Uso documental y funcionamiento administrativo en Ugarit: la 'Casa de las grandes Vasijas'", *Isimu. Revista sobre oriente Próximo y Egipto en la antigüedad* 7: 203-222.
- Zamora, J.-Á. 2005. "L'ubriachezza a Ugarit: un'eredità discussa", *Mediterranea* 2: 9-26.